1871.

BOROUGH OF CARDIFF.

THE

Report to the Local Board,

MADE ON 27TH OCTOBER, 1871,

BY

H. J. PAINE, M.D.,

OFFICER OF HEALTH.

Printed by Order of the Local Board of Health.

CARDIFF:

LEWIS AND WILLIAMS, MACHINE-PRINTERS, DUKE STREET.

THE

Report of the Medical Officer of Health.

FOR THE MONTH OF OCTOBER.

To the Cardiff Local Board of Health.

CARDIFF, *October 26th*, 1871.

GENTLEMEN,

I HAVE to report that the total deaths registered in Cardiff during the four weeks ending October 20, have been 55. The death rate being 17 per 1000, while the average death rate ruling a town population is 22 per 1000, indicates the Sanitary condition of Cardiff to be in a most satisfactory state

Of the 55 deaths, 8 were registered from diseases of the brain and nervous system, 16 from pulmonary affections, 2 from disease of heart, 1 from liver disease, 6 from sporadic diseases of uncertain seat, 3 from age, 4 were occasioned by accidents or other causes requiring a Coroner's investigation; 9 were from zymotic or infectious diseases, of these 2 were from diarrhœa, 1 being an adult inmate of the Union,

the other an infant, 3 were from scarlatina; 1 from small pox, this was a foreign seaman admitted into the "Hamadryad" Seamen's Hospital; 1 was from measles; and 2 from fever, 1 of these was an adult, the other an infant.

On Monday night a Dutch vessel called the "Johanna Maria," from Rotterdam, was reported to me as having arrived in the roads with a sick seaman on board. The ship was immediately visited, and the case found to be one of simple diarrhœa.

I have now to direct your attention to a matter of considerable importance in connexion with the Sanitary previsions of the town. Early on Tuesday morning I was requested by Mr. Moir, the Veterinary Surgeon who acts as your Inspector for the Suppression of the Cattle Plague, and Inspector James, to examine the Carcases of some Pigs that had been slaughtered the previous day. Mr. Moir then pointed out to me the appearance of the foot in each case as indicating the existence of the Foot and Mouth Disease. Some had unmistakable evidences of Ulceration, being in the advanced stage, while others had the characteristic inflammation in the foot, but were either milder, or in a less advanced degree.

Believing, in my Official capacity, this disease would come under my notice, I have for some time paid attention to its character and history, and therefore know that it exists in an epidemic form, spreading by infection or contagion, that instances are reported to have occurred again and again in infected districts,

where animals have suffered from it without being in direct communication with other animals already labouring under the disease; that the morbific poison exists in the atmosphere, and is received into the lungs dnring the process of respiration; that it then passes into the circulation, and through it produces a period of constitutional disturbance or fever; that after this, the poison is in most cases eliminated from the system by a process of suppuration usually in the foot and mouth when the animal recovers, but in more severe cases it produces pustules in the skin, pustules in the mammœ and teats, and ulceration of the mucous membrane of the bowels, with other symptoms; and that although the name given to the disease might to the non-professional mind convey the erroneous impression that it is a local disease, it is called the Foot and Mouth Disease, simply because one of its most constant and marked symptoms is found in one or both of those parts of the animal, as in man when suffering from some of the exanthematous diseases, as small pox, measles, or scarlatina, these names are given because of the special, or characteristic appearances presented by the skin, and are not intended to mean that the whole of the disease is confined to the tegumentary covering of the body.

Having this strong opinion of the nature of the disease, I had no difficulty in stating that animals when slaughtered while labouring under it are unfit for human food; but as this was the first instance in this district where proceedings had been taken before the Magistrates under the Health of Towns Act, I

desired to guard myself against the assumption that I had arrived at a hasty or unguarded opinion. I therefore telegraphed to Dr. LETHEBY, the Officer of Health for the City of London, a gentleman who has had the most extensive experience in these matters, to ascertain from him whether I ought, under the circumstances, to ask the Magistrates to make an order to destroy the carcases in question; to which he gave an immediate and unqualified reply that I ought to do so.

The necessary application was therefore made, and the owners of the carcases tendered evidence in the person of Mr. SHEAF, a Veterinary Surgeon from Newport, that the pigs did not suffer from this disease, and that it was simply a local disease when it did exist. Mr. SHEAF also ventured to assert and I must here direct your special attention to this circumstance, that this was the view entertained by Professor SIMONDS, and other eminent Professors of Veterinary Medicine. He then further states that it was only necessary to remove the feet to render the carcases perfectly fit for human food.

I have now, therefore, to give the nature of the disease as described by Professor GAMGEE, Principal of the New Veterinary College, Edinburgh, as it appears in his work on the "Diseases of our Domestic Animals." He there describes it as follows, at page 265:—

Epizootic Aphtha—The Foot and Mouth Disease. —"In 1840 and 1841, the Epidemic broke out in England and Ireland. The then so called Epidemic, is the *Epizootic Aphtha* of Continental authors, and the *Eczema Epizootica* of Professor SIMONDS.

"It is a contagious eruptive fever, affecting all warm-blooded animals, and attacking man, under certain circumstances, as readily as any of our domestic quadrupeds.

"In 1834, the Foot and Mouth Disease rapidly travelled through Podolia, from east to west, and HENSINGER specially remarks that England escaped as it had done in every previous attack. At this time, repeated observations were made as to the communication of the disease from animals to man. HUTWIG performed experiments at Berlin, and many cases were reported on having been witnessed in France.

"In 1839, the malady was very severe, and its attacks amongst human beings were specially observed.

"As then stated, the disease is invariably characterised by a brief period of incubation, varying from twenty-four hours to three or four days. It is ushered in by a shivering fit, and a vesicular eruption occurs in the mouth and on digits; in female animals also on the teats;" he then enters someweat largely into its effect on other parts of the system,—as the fauces, pharynx, larynx, and whole of the digestive tube, as also the feet. Afterwards, he says:—"All symptoms of fever subside in favourable cases on the fourth day, and convalescence is established on the eighth. Complications are not unfrequent; the fever runs high—ulceration spreads—the animal becomes exhausted—the hoofs slough off—*the blood becomes impure*, and death occurs about the ninth or tenth day." At page 271, he says "the communication

of the disease to man admits of no doubt. The history of the various outbreaks of the disease demonstrates this."

I now make some extracts from a Report on Murrain, by GEORGE ARMITAGE, M.R.C.V.S., Professor of Anatomy and Physiology in the Glasgow Veterinary College, printed in the "Highland Society of Scotland's Transactions," and for which he received a Gold Medal.

"Murrain, or, as it has been variously denominated *Enzootic Aphtha*, *Epizootic Aphtha* (by Continental writers), *Eczema*, and *Epizootica* of Professor SIMONDS, (Professor SIMONDS being the authority alluded to by Mr. SHEAF as holding the opinion similar to him, that it is a Local Disease), and in the vernacular, Foot and Mouth Disease, is an exanthematous or eruptive febrile disease of horned cattle, possessing contagious characters by which it is capable of propagation and communication to man under certain circumstances.

The contagious and infectious properties are truly verified in the numberless instances, in which the symptoms are speedily exhibited in cattle on farms where others are introduced labouring under the affection,—horses, pigs, dogs, and even fowls, not escaping. This depending, as in all highly contageous diseases, upon the blood being primarily affected through absorption by the lungs, or mucous surface inoculation, &c." He then describes symptoms similar to those mentioned by Professor GAMGEE.

In page 481 of the *Veterinarian* for the month of July in the present year, a Journal of Veterinary

Science, edited by Professor SIMONDS. In an editorial article he says that 'very little alteration has taken place with regard to the prevalence of this disease during the past month, and that 49 counties are reported as infected, having a total number of centres amounting to 403; and *that stringent measures have been taken to prevent the meat and milk of diseased cattle being disposed of for consumption.*'

After a patient investigation, and Mr. MOIR having expressed a decided opinion as to the existence of the Foot and Mouth Disease in two of the carcases, while entertaining a strong conviction that the others were more or less affected, he declined to speak positively in these cases, the Magistrates immediately gave an order for the destruction of the two carcases, but made none in the others.

I may now state that my attention has for some time been attracted to the frequent occasions of cases of an anomalous pustular affection of the hands and fingers, attended with febrile disturbance, that have come under my observation; and I have expressed my opinion then that these attacks were due to improper food and my strong opinion of the unfitness for human consumption of meat of animals slaughtered while suffering from the disease now under consideration, being supported by the authorities I have quoted, I have to suggest to your Board the necessity of increased activity on the part of your executive in preventing such meat being brought into the market.

I have entered thus elaborately into this matter, being impressed with the strong conviction that it is one in which the public health is deeply involved.

I have the honour to be,

GENTLEMEN,

Your obedient Servant,

H. J. PAINE, M.D.,

Medical Officer of Health.

LEWIS & WILLIAMS, STEAM-PRINTERS, CARDIFF.